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PATENT SPECIFICATION

DRAWINGS ATTACHED

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COMPLETE SPECIFICATION

A combined Seat and Receptacle forming an aid to Gardening

We, FRANK RADCLIFFE, a British Subject, of The Cedar House, Loddington, near Kettering, Northamptonshire, and PETER HARLEY RADCLIFFE, a British Subject, of 14, The Crescent, Northampton, do hereby declare the invention, for which we pray that a patent may be granted to us and the method by which it is to be performed, to be particularly described in and by the following statement:—

Many of the less strenuous gardening pursuits are at present either denied to, or are difficult of performance by, persons suffering with rheumatism and similar painful affections affecting muscles and joints, and causing stiffness and swellings, of the legs and adjoining lower body parts.

Thus, for instance, such persons find it most difficult, if not practically impossible, without pain or subsequent suffering or ill effects, to carry out the operations of, say bushes and small trees, the picking of ground width of the seat and the mouth of the open-fruits, and so on, which operations in the ordinary way necessitate kneeling, squatting on the haunches, stooping and similar attitudes on the part of the gardener, at least some of which attitudes bring the knees and other parts into direct contact with the ground.

The object of this invention is to provide a simple, efficient and economically produced aid to gardening designed more especially, although by no means exclusively, for the use of the particular class of persons aforesaid. Accordingly, the primary aim is to enable such a person, by the adoption of this aid, to indulge in certain of the less strenuous gardening activities in a degree of comfort and with practically no risk of subsequent ill effects.

The gardening aid constituting the invention consists of a low stool-like seat of hollow form upon and astride which a gardener can sit, with an opening into the hollow interior of the seat located between his or her knees,

the said seat having a rear flat portion and an adjoining upwardly-curved or arcuate front portion whereby the seat is adapted normally to rest upon its rear portion flat upon the ground with the seat portion so disposed as to enable the gardener to sit in an upright position, but is capable of rocking forwardly upon the curved or arcuate front portion to incline the seat portion forwardly as the gardener leans forwards in the performance of the operation concerned.

Thus, as will be appreciated, a gardener using the seat sits upon and astride the seat portion with his or her feet planted firmly on the ground in front, or mainly in front, of the seat. As a consequence of the gardener sitting upright from time to time a flat portion of the seat bottom is brought fully into contact with the ground so that the gardener can take his or her ease in a firmly supported and relaxed condition. When, however, the gardener leans forwardly to resume the gardening operation in hand, the seat will automatically rock forwardly to dispose the seat portion at such an angle as to maintain the gardener's stability and comfort. When in use, the seat is, of course, shifted from time to time as the work being undertaken progresses.

The opening into the hollow interior of the low seat may advantageously adjoin the leading edge of the seat portion and extend well in front of the latter. The said opening may, moreover, extend the full width of the seat or substantially so, and the mouth of the opening is preferably contained in a plane downwardly inclined somewhat with respect to the seat portion.

In any event, the interior of the hollow seat constitutes a useful receptacle for a variety of possible purposes. For example, when weeding or pruning, the collector weeds or other refuse can be readily thrown into the receptacle through the opening so favourably disposed between the gardener's thighs.

[Price 3s. 6d.]

When a planting operation is to be carried out, the receptacle can contain plants or bulbs so that these are ready to hand as planting progresses. Or the receptacle can be used to accommodate any necessary small gardening implements.

In order that the invention may be more clearly understood and readily carried into practical effect two specific constructions thereof will now be described, by way of example, with reference to the accompanying drawings, wherein:—

Figure 1 is a general perspective view from the front of a hollow gardening seat constructed from sheet metal,

Figure 2 is a side elevation of the hollow seat shown in Figure 1 and depicting its rocking motion in use,

Figure 3 is a general perspective view of a hollow seat of the same general form as that shown in Figures 1 and 2 but which is of different construction, being moulded in a plastic, and

Figure 4 is a cross-section taken on the line IV to IV of Figure 3.

Like parts are designated by similar reference characters throughout the drawings.

Referring first to Figures 1 and 2, the hollow gardening seat has two spaced vertical plane side walls 1, a plane back 2, which may either be inclined rearwardly towards its bottom edge as shown or extend vertically, an integral plane top 3 which extends slightly downwards and rearwards from the horizontal and connects portions of the upper edges of the side walls 1 and the back 2, and a bottom indicated generally at 4 having a rear flat portion 4a, and an adjoining upwardly-curved or arcuate front portion 4b.

A seat portion 5 is provided on the top 3 with the front edge of the seat portion 5 coincident with the front edge of the latter. This portion 5 is in the form of a pad of any suitable resilient material, for example of rubber, foamed latex or the like. In any event, this pad is secured to the top 3 by any suitable means, for example by a suitable cement, and may be covered in leather, a textile fabric or a suitable plastic sheeting.

The opening into the hollow interior of the seat at the front thereof between the top 3 and the front edge of the bottom portion 4b is rectangular, extends the full width of the hollow seat and is contained in a forwardly-inclined plane extending at an angle of 150° or thereabouts with respect to the top 3.

The hollow seat of this example is made from sheet metal, and preferably from a single suitably-shaped metal blank cut, folded and secured together at appropriate edges by rivetting or welding. Alternatively, the article may be made of two or more initially separate pieces of sheet metal.

The periphery of the mouth of the said opening into the hollow seat is in this case,

strengthened by rolling over the metal into the form of a rib 6 which may be reinforced by the incorporation therein of a length of wire.

The hollow gardening seat is strengthened, to guard against collapse of the structure when loaded by the weight of a seated person, by a reinforcing member 7 located within the seat. This reinforcing member 7 is constituted by a single metal strip or bar of inverted U-form located with its semi-circular upper portion in contact with the inside of the top 3 below the seat portion 5 and its depending limbs attached to the interior of the side walls 1 by means of rivets 8.

The rocking motion of the hollow seat in use is depicted in Figure 2. Normally the seat is disposed with the rear plate portion 4a of the bottom 4 resting in contact with the ground. When a person sitting upon the seat leans forwardly the seat rocks forwardly, to a position such as that shown in chain lines in Figure 2, onto the curved or arcuate front portion 4b. With the seat in its fully rocked forward position, inclined to a greater extent than is depicted in Figure 2, the top 3 (and hence the seat portion 5) extends downwards and forwards although the inclination is only a matter of a few degrees from the horizontal.

The hollow seat shown in Figures 3 and 4 is of the same general form, and is used in precisely the same way, as that shown in Figures 1 and 2, but instead of being constructed of sheet metal is moulded from a suitable plastic material, fibreglass or the like.

This moulded seat has plane sides 1, a plane back 2 and bottom portions 4a and 4b of identical shape and disposition as those in the seat shown in Figures 1 and 2. In this construction, however, to facilitate moulding there is no top corresponding to the top 3 in the construction described above so that the seat is initially completely open at the top,

and the seat is strengthened by a reinforcing member 7 of a different form to that previously described. The member 7, as seen most clearly in Figure 4, is here in the form of a strip or plate bent transversely at spaced intervals to provide a bottom 7a serving to space two vertical limbs 7b. This member 7 is embedded in the seat with its bottom 7a in the bottom 4 and its sides 7b within the opposite side walls 1, which are of greater thickness at the required location to accommodate this member 7. The vertical limbs 7b of the member 7 are bent inwardly towards one another adjacent their upper ends in alignment with the upper edges of the side walls 1, to provide flanges 7c.

A seat portion 5, having a base 9 of rigid material, bridges the side walls 1 and is secured to the member 7 by means of bolts or rivets passing through the flanges 7c, so as to partially close the top of the hollow seat.

This seat portion 5 (as with the corresponding seat portion 5 shown in Figures 1 and 2) has a pad of any suitable resilient material, in this case secured on the base 9 by any appropriate means, e.g. by an adhesive, which is covered in leather, a textile fabric, or a sheet plastic.

The front of this seat portion 5 again defines the rear edge of the rectangular opening into the hollow interior of the seat. Moreover, since the seat portion 5 does not extend to the rear of the hollow gardening seat, there is, in this case, a further opening into the interior of the hollow seat between the seat portion 5 and the back 2.

It will be appreciated that the hollow gardening seat could be made of other material, for example, of wood.

In any event the seat may be of any desired size but may, for example be about 22" or a little more in length, 10" wide and approximately 12" in height.

WHAT WE CLAIM IS:—

1. A gardening aid in the form of a low stool-like seat of hollow form upon and astride which a gardener can sit, with an opening into the hollow interior of the seat located between his or her knees, the said seat having a rear flat portion and an adjoining upwardly-curved or arcuate front portion whereby the seat is adapted normally to rest upon its rear portion flat upon the ground with the seat portion so disposed as to enable the gardener to sit in an upright position, but is capable of rocking forwardly upon the curved or arcuate front portion to incline the seat portion forwardly as the gardener leans forwards in the performance of the operation concerned.

2. A gardening aid according to Claim 1 wherein the opening into the hollow interior of the seat adjoins the leading edge of the seat portion and extends well in front of the latter.

3. A gardening aid according to Claim 2, wherein the said opening extends the full width of the seat and the mouth of the opening is contained in a plane downwardly-inclined with respect to the seat portion.

4. A gardening aid according to any of Claims 1 to 3, which comprises two spaced vertical plane sides serving to support a seat portion, a plane back, and a bottom providing the said flat and upwardly curved or arcuate portion.

5. A gardening aid according to Claim 4, wherein the seat portion includes a rigid base and bridges the side walls of the shallow seat so as to partially close the initially open top of the seat.

6. A gardening aid according to Claim 4, which includes an integral plane top which extends slightly downwards and rearwards from the horizontal and connects portions of the upper edges of the side walls of the seat and the upper edge of the back of the latter, the said seat portion being attached to the upper side of this top with its front edge coincident with the front edge of the latter.

7. A gardening aid according to Claim 5 or 6, wherein the seat portion includes a pad of a resilient material covered in leather, a textile fabric, a suitable plastic or the like.

8. A gardening aid according to any of Claims 1 to 7, in which, in its fully rocked forward position, the seat portion extends downwards and forwards for a few degrees from the horizontal.

9. A gardening aid according to Claim 4, wherein the plane back is slightly inclined rearwardly towards its lower edge.

10. A gardening aid according to any of the preceding claims, which is made from a single suitably-shaped metal blank cut folded and secured together at appropriate edges by rivetting or welding.

11. A gardening aid according to any of Claims 1 to 9 which is moulded in one piece from a suitable plastic material, fibre glass or the like.

12. A gardening aid according to Claims 6 and 10, which is strengthened by a reinforcing member in the form of a metal strip or bar of inverted U-form located within the hollow seat with its semi-circular upper portion in contact with the underside of the base of the seat portion and with its depending limbs connected, e.g. by rivets, to the side walls of the hollow seat.

13. A gardening aid according to Claims 5 and 11, which is strengthened by a reinforcing member in the form of a broad strip or plate bent at right angles at spaced intervals to provide a bottom portion connecting two spaced integral upright portions, this member being embedded within the hollow seat with its bottom in the bottom of the latter and its upright portions in the opposite side walls of the seat.

14. A gardening aid substantially as herein described with reference to Figures 1 and 2 of the accompanying drawings.

15. A gardening aid substantially as herein described with reference to Figures 3 and 4 of the accompanying drawings.

E. N. LEWIS & TAYLOR,
Chartered Patent Agents,
Berridge Street Chambers, Leicester,
Agents for the Applicants

PROVISIONAL SPECIFICATION

A combined Seat and Receptacle forming an aid to Gardening

We, FRANK RADCLIFFE, a British Subject, of The Cedar House, Loddington, near Kettering, Northamptonshire, and PETER HARLEY RADCLIFFE, a British Subject, of 14, The Crescent, Northampton, do hereby declare this invention to be described in the following statement:—

Many of the less strenuous gardening pursuits are at present either denied to, or are difficult of performance by, persons suffering with rheumatism and similar painful afflictions affecting muscles and joints, and causing stiffness and swellings, of the legs and adjoining lower body parts.

Thus, for instance, such persons find it most difficult, if not practically impossible, without pain or subsequent suffering or ill effects, to carry out the operations of, say, weeding, planting, the pruning of certain bushes and small trees, the picking of ground fruits, and so on, which operations in the ordinary way necessitate kneeling, squatting on the haunches, stooping and similar attitudes on the part of the gardener, at least some of which attitudes bring the knees and other parts into direct contact with the ground.

The object of this invention is to provide a simple, efficient and economically produced aid to gardening designed more especially, although not exclusively, for the use of the particular class of persons aforesaid. Accordingly, the primary aim is to enable such a person, by the adoption of this aid, to indulge in certain of the less strenuous gardening activities in a degree of comfort and with practically no risk of subsequent ill effects.

The gardening aid constituting the invention consists of a low stool-like seat of hollow form upon and astride which a gardener can sit, with an opening into the hollow interior of the seat located between his or her knees, the said seat being adapted normally to rest flat upon the ground with the seat portion so disposed as to enable the gardener to sit in an upright position, but being capable of rocking to incline the seat portion forwardly as the gardener leans forwards in the performance of the operation concerned.

Thus, as will be appreciated, a gardener using the seat sits upon and astride the seat portion with his or her feet planted firmly on the ground in front, or mainly in front, of the seat. As a consequence of the gardener sitting upright from time to time a flat portion of the seat bottom is brought fully into contact with the ground so that the gardener can take his or her ease in a firmly supported and relaxed condition. When, however, the gardener leans forwardly to resume the gardening operation in hand, the seat will automatically rock forwardly to dispose the seat portion at such an angle as to maintain

the gardener's stability and comfort. When in use, the seat is, of course, shifted from time to time as the work being undertaken progresses.

The opening into the hollow interior of the low seat may advantageously adjoin the leading edge of the seat portion and extend well in front of the latter. The said opening may, moreover, extend the full width of the seat or substantially so, and the mouth of the opening is preferably contained in a plane downwardly inclined somewhat with respect to the seat portion.

In any event, the interior of the hollow seat constitutes a useful receptacle for a variety of possible purposes. For example, when weeding or pruning, the collected weeds or other refuse can be readily thrown into the receptacle through the opening so favourably disposed between the gardener's thighs. When a planting operation is to be carried out, the receptacle can contain plants or bulbs so that these are ready to hand as planting progresses. Or the receptacle can be used to accommodate any necessary small gardening implements.

In a convenient embodiment of the invention, the hollow seat has vertical plane sides, a plane back which is either vertical or slightly inclined rearwardly, a plane top which extends slightly downwards and rearwards from the horizontal and constitutes a seat portion and a bottom having a rear flat portion adapted normally to rest in contact with the ground and an adjoining upwardly curved or arcuate front portion upon which the seat can rock forwardly from its normal status and back again, as occasion demands. With the seat in its fully rocked forward position the seat portion extends downwards and forwards, although the inclination is only a matter of a few degrees from the horizontal. In this particular embodiment, the opening into the hollow interior of the seat is rectangular, extends the full width of the article and is contained in a forwardly inclined plane extending at an angle of 150° or thereabouts with respect to the seat portion.

Although the hollow gardening seat may be fabricated or moulded in any appropriate material such as wood or a plastic, it is primarily the intention to make it wholly of sheet metal. In this last regard the seat may, for example, be fashioned from a suitably shaped single-piece sheet metal blank cut, folded and secured together by riveting or welding. Alternatively, the article may be made up of two or more initially separate pieces of sheet metal.

In a sheet metal seat, the periphery of the mouth of the opening therein may be strengthened by rolling over the metal into

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the form of a rib and, if desired, this rib may be reinforced by the incorporation therein of a length of wire.

5 So far as a sheet metal seat is concerned, moreover, the seat portion and the adjoining side walls may advantageously be strengthened, to guard against collapse of the structure when loaded by the weight of a seated person, by the insertion into the hollow interior
10 of one or more appropriately shaped and located strengthening members. A single metal strip or bar of inverted U-form located with its depending limbs in contact with the inner surfaces of these side walls and with
15 its semi-circular upper portion in contact with the underside of the seat portion is found to be sufficient and eminently satisfactory for this purpose. Such a strengthening member may conveniently be riveted into position,

although there is no limitation in this respect. 20

The seat portion may be padded or upholstered to make it more comfortable. For example, a rectangular and resilient pad of foamed latex, rubber or the like, covered in leather, a textile fabric or a suitable plastic sheeting may be secured upon the seat portion immediately at the rear of the opening in the hollow seat. 25

A seat about 20" or a little more in length, 10" wide and 11" or 12" in overall height is found to be sufficient for the intended purpose, although these dimensions may, of course, be varied according to requirements. 30

E. N. LEWIS & TAYLOR,
Chartered Patent Agents,
Berridge Street Chambers, Leicester,
Agents for the Applicants.

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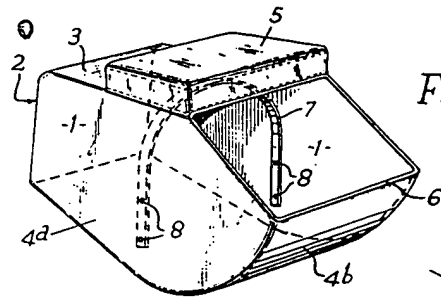


Fig. 1.

Fig. 2.

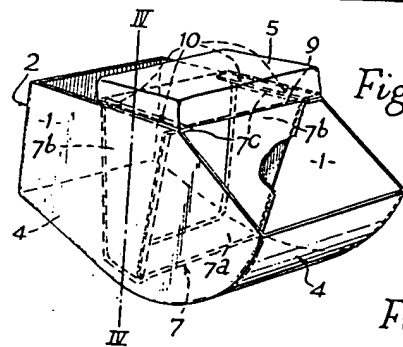
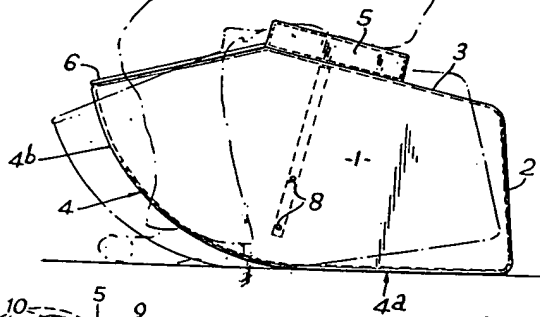
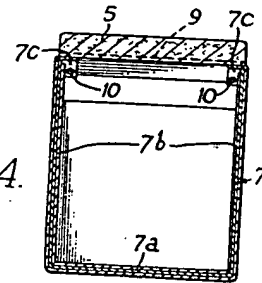


Fig. 3.

Fig. 4.



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ANNEX TO THE INTERNATIONAL SEARCH REPORT ON INTERNATIONAL PATENT APPLICATION NO.

FR 9000053
SA 34196

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
DE-C- 825144		None	
US-A- 4087070	02-05-78	None	
DE-A- 2944674	14-05-81	None	
EP-A- 0006729	09-01-80	AT-T- E6577	15-03-84
		CA-A- 1147640	07-06-83
		JP-A- 55005692	16-01-80
		US-A- 4377309	22-03-83

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